CHAPTER 57 NEW TANK PERFORMANCE STANDARDS

Secs.

5700 EXISTING AND NEW UST SYSTEMS - GENERAL PROVISIONS

5700.1 The owner or operator of each existing or new petroleum UST system, except for heating oil USTs, shall comply with one (1) of the following:

(a) UST systems, installed after November 12, 1993, shall meet the UST system performance standards for new petroleum USTs set forth in §5701 of this chapter at the time they are installed; or

(b) UST systems, installed on or before December 22, 1988, shall have met the upgrade requirements set forth in Chapter 58 or the permanent closure requirements set forth in Chapter 61 by December 22, 1998 and any applicable requirements for corrective action set forth in Chapter 62; or

(c) UST systems, installed prior to November 12, 1993, shall comply with the federal new tank performance standards set forth in 40 CFR §280.20. UST systems in this category which have not met the federal standards must be immediately upgraded to meet these standards, permanently closed in accordance with Chapter 61 or replaced with a UST system which meets the District's new tank performance standards set forth in §5701.

5700.2 The owner or operator of each UST system shall ensure that the UST system satisfies the release detection requirements set forth in Chapter 60.

5700.3 The owner or operator of each hazardous substance UST system, installed after November 12, 1993, shall ensure that the UST system meets the UST performance standards set forth in §5702.

5700.4 Except as provided in §§5700.5, the owner or operator of each existing hazardous substance UST system shall have ensured that no later than December 22, 1994, the UST system:

(a) Meets the UST performance standards for new hazardous substance USTs set forth in §5702; or

(b) Meets the permanent closure requirements set forth in Chapter 61, including applicable requirements for corrective action set forth in Chapter 62.

5700.5 Existing hazardous substance UST systems which were installed or upgraded prior to November 12, 1993, and have complied with the new UST performance standards set forth in §5701 shall be exempt from the requirements of § 5700.4.

5700.6 New heating oil tanks, having a capacity of 1,100 gallons or more must meet the requirements of §5700.7, §5700.9, §5700.10; and §5703, through §5706.

5700.7 In addition to meeting the requirements of this chapter, the owner or operator of each UST system located within one hundred feet (100') (measured horizontally) from the outside wall of a subsurface transit structure shall meet the requirements of the BOCA National Fire Prevention Code, the Fire Prevention Code, as defined in §7099.1, and the National Fire Protection Association (NFPA) 130 pertaining to fixed guideway transit systems.

5700.8 In order to prevent releases due to structural failure, corrosion, or spills and overfills for as long as the UST system is used to store regulated substances, each owner or operator of an underground storage tank or UST system installed after December 22, 1988, shall ensure that each tank meets the applicable requirements set forth in this chapter.

5700.9 Each tank shall be properly designed and constructed, and any portion underground that routinely contains a regulated substance shall be protected from corrosion, in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified by the Director, and in accordance with the BOCA National Fire Prevention Code and the Fire Prevention Code and shall meet the requirements of this chapter.

5700.10 Alternative tank construction and corrosion protection may be approved by the Director, if the tank construction and corrosion protection are determined by the Director to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the other provisions of this chapter.

5701 NEW PETROLEUM UST SYSTEMS

5701.1 Except as provided in §5700.10, each new petroleum underground storage tank, except for heating oil USTs, shall be constructed of:

(a) Fiberglass-reinforced plastic with double-walled construction or other secondary containment system as set forth in §§5701.4, 5701.5, and 5701.6;

(b) Steel-fiberglass-reinforced plastic composite with double wall construction or other secondary containment system as set forth in §§5701.4, 5701.5, and 5701.6; or

(c) Steel with double-walled construction or other secondary containment system as set forth in §§5701.4, 5701.5 and 5701.6, and the tank shall be cathodically protected in accordance with the requirements of §5701.2.

5701.2 Each steel tank shall be cathodically protected by being coated with a suitable dielectric material, and in addition:

(a) Field-installed cathodic protection systems shall be designed by a corrosion expert; and

(b) Impressed current cathodic protection systems shall be designed to allow determination of current operating status as required by §5901.6.

5701.3 Each cathodic protection system shall be operated and maintained in accordance with §5901.

5701.4 Secondary containment systems shall be designed, constructed, and installed to do the following:

(a) Contain regulated substances released from the tank system until they are detected and removed;

(b) Prevent the release of regulated substances to the environment at any time during the operational life of the UST system; and

(c) Check for evidence of a release at least every thirty- (30) days.

5701.5 Double-walled tanks shall be designed, constructed, and installed to do the following:

(a) Contain a release from any portion of the inner tank within the outer wall; and

(b) Detect the failure of the inner wall.

5701.6 External liner systems (including vaults) shall be designed, constructed, and installed to do the following:

(a) Contain one hundred ten percent (110%) of the capacity of the largest tank within its boundary;

(b) Prevent the interference of precipitation or ground-water intrusion with the ability to contain or detect a release of regulated substances; and

(c) Surround the tank completely and be capable of preventing lateral, as well as vertical migration of regulated substances.

5702 NEW HAZARDOUS SUBSTANCE UST SYSTEMS

5702.1 Except as provided in §5700.10, each new hazardous substance underground storage tank shall be:

(a) Constructed of fiberglass-reinforced plastic, steel-fiberglass-reinforced plastic composite, or steel;

(b) If constructed of steel, cathodically protected in accordance with the requirements of §5702.2 and;

(c) Of three hundred sixty degree (360□) double wall construction as set forth in §5702.6.

5702.2 Each steel tank shall be cathodically protected by being coated with a suitable dielectric material, and in addition:

(a) Field-installed cathodic protection systems shall be designed by a corrosion expert; and

(b) Impressed current cathodic protection systems shall be designed to allow determination of current operating status as required by §5901.6.

5702.3 Each cathodic protection system shall be operated and maintained in accordance with §5901.

5702.4 Double-walled tanks shall be designed, constructed, and installed to do the following:

(a) Contain a release from any portion of the inner tank within the outer wall until detected and removed;

(b) Detect the failure of the inner or outer wall; and

(c) Prevent the release of regulated substances to the environment at any time during the operational life of the UST system.

5703 NEW HEATING OIL UST SYSTEMS

5703.1 Except as provided in §5700.10, each new heating oil underground storage tank, having a capacity of one thousand and one hundred (1,100) gallons or more, installed after November 12, 1993, whether of single or double-walled construction, shall be constructed of the following:

(a) Fiberglass-reinforced plastic;

(b) Steel-fiberglass-reinforced plastic composite; or

(c) Steel and shall be cathodically protected in accordance with the requirements of §5703.2.

5703.2 Each steel tank shall be cathodically protected by being coated with a suitable dielectric material, and, in addition:

(a) Field-installed cathodic protection systems shall be designed by a corrosion expert; and

(b) Impressed current cathodic protection systems shall be designed to allow determination of current operating status as required by §5901.6.

5703.3 Each cathodic protection system shall be operated and maintained in accordance with §5901.

5703.4 Secondary containment systems shall be designed, constructed, and installed to do the following:

(a) Contain regulated substances released from the tank system until they are detected and removed;

(b) Prevent the release of regulated substances to the environment at any time during the operational life of the UST system;

(c) In accordance with §6003.7, check for evidence of a release at least every thirty- (30) days.

5703.5 Double-walled tanks shall be designed, constructed, and installed to do the following:

(a) Contain a release from any portion of the inner tank within the outer wall; and

(b) Detect the failure of the inner wall.

5703.6 External liner systems (including vaults) shall be designed, constructed, and installed to do the following:

(a) Contain one hundred ten percent (110%) of the capacity of the largest tank within its boundary;

(b) Prevent the interference of precipitation or ground water intrusion with the ability to contain or detect a release of regulated substances; and

(c) Surround the tank completely and be capable of preventing lateral, as well as vertical migration of regulated substances.

5704 NEW PIPING FOR UST SYSTEMS

5704.1 The piping that routinely contains regulated substances and is in contact with earthen materials shall be properly designed, constructed, and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory, as specified by the Director.

5704.2 Except as provided in §5704.7, underground storage tank system piping shall be constructed of:

(a) Fiberglass-reinforced plastic;

(b) Steel and shall be cathodically protected in accordance with the requirements of §5901**;** or

(c) Other materials approved by the Director in accordance with §5704.8.

5704.3 Steel UST piping shall be cathodically protected by being coated with a suitable dielectric material, and, in addition:

(a) Field-installed cathodic protection systems shall be designed by a corrosion expert; and

(b) Impressed current cathodic protection systems shall be designed to allow determination of current operating status as required by §5901.6.

5704.4 Each cathodic protection system shall be operated and maintained in accordance with §5901.

5704.5 Except as provided in §5704.7, underground piping for hazardous substance USTs, and pressurized underground piping for all petroleum USTs shall be equipped with secondary containment features that are designed and constructed in compliance with the requirements of §5701.4 of this chapter.

5704.6 For the purposes of this section, "pressurized underground piping" includes pressurized supply lines, return lines, and remote fill lines.

5704.7 Secondary containment shall not be required for vent pipes, Stage II vapor recovery pipes, vertical fill pipes, or piping for hazardous substance USTs used for industrial use.

5704.8 Other materials and construction techniques may be used for UST piping if the piping construction and corrosion protection are determined by the Director to be designed to prevent the release or threatened release of any stored regulated substance in a manner that is no less protective of human health and the environment than the other provisions of this section.

5705 SPILL AND OVERFILL PREVENTION EQUIPMENT FOR NEW AND UPGRADED USTs

5705.1 Except as provided in §5705.3, to prevent spilling associated with the transfer of regulated substances to an UST system, each owner or operator must use spill prevention equipment (such as a spill catchment basin) that will prevent release of regulated substances when the transfer hose is detached from the fill pipe.

5705.2 The spill prevention equipment shall have a minimum capacity of ten (10) gallons.

5705.3 Except as provided in §5705.5, to prevent overfilling associated with the transfer of regulated substances, each owner or operator shall use overfill prevention equipment that does the following:

(a) Automatically shuts off flow into the tank when the tank is no more than ninety-five percent (95%) full;

(b) Alerts the transfer operator when the tank is no more than ninety percent (90%) full by restricting the flow into the tank or triggering a high-level alarm;

(c) For tanks with a capacity of four thousand (4,000) gallons or more, equipment which will restrict flow thirty (30) minutes prior to overfilling, or automatically shut-off flow into the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.

5705.4 Tanks that are susceptible to over-pressurization, shall only use an automatic shutoff valve to comply with §5705.3.

5705.5 An owner or operator shall not be required to provide and use the spill and overfill prevention equipment specified in this section if:

(a) Alternative equipment is used that is determined by the Director to be no less protective of human health and the environment than the equipment specified in the other provisions of this section; or

(b) The UST system is filled by transfers of no more than twenty-five (25) gallons at one time.

5706 INSTALLATION OF NEW UST SYSTEMS

5706.1 Each UST system, including all tanks and piping, shall be installed in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory and in accordance with the manufacturer's instructions, as specified by the Director and in accordance with the BOCA Fire Prevention Code and the. Fire Prevention Code.

5706.2 Each owner or operator shall ensure that each UST is installed by an UST System Technician, as set forth in Chapter 65 of this Subtitle.

5706.3 All work listed in the manufacturer's installation checklist for each item shall be completed for each UST installation.

5706.4 Each installation shall be inspected and approved by the Director prior to placement of backfill for completion of installation.

5706.5 A precision test shall be performed upon installation of an UST system prior to its use.

5706.6 The owner or operator shall ensure that the UST System Technician completes the certification of compliance in accordance with §§5706.2 and 5706.3 provided on the UST notification form approved by the Director in accordance with §5600 of this Subtitle.